HP-200310041-1

REMARKS/ARGUMENTS

Claims 1-26 are pending. Claims 1-6, 8-23, and 25-26 are rejected under 35 U.S.C. §103(a). The Examiner has indicated that Claims 7 and 24 are allowable if rewritten in independent form including all of the limitations of the based claim and any intervening claims. Applicants respectfully request further examination and reconsideration in view of the instant response. No new matter has been added herein.

CLAIM REJECTIONS

Rejection under 35 U.S.C. §103(a)

Express and Implied Motivation to Combine References Bozak and Devarakonda is Lacking

Claims 1-5, 8-15, 18-22, and 25-26

references Bozak and Devarakonda is lacking.

Claims 1-5, 8-15, 18-22, and 25-26 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Bozak, (U.S. 2005/0027864), hereinafter referred to as "Bozak", in view of Devarakonda, (U.S. 6,424,992), hereinafter referred to "Devarakonda". Applicants have reviewed the cited references and respectfully submit that Examiner's conclusion of obviousness is based on improper hindsight reasoning because express or implicit motivation to combine the

In determining the propriety of the Patent Office case for obviousness in the first instance, it is necessary to ascertain whether or not the reference teachings would appear to be sufficient for one of ordinary skill in the relevant art having the reference before him to make the proposed substitution, combination, or other modification.

Serial No.: 10/632,447 8 Examiner: Bayard, Djenane M.
Art Unit: 2141

In re Linter, 458 F.2d 1013, 1016, 173 USPQ 560, 562 (CCPA 1972). Applicants respectfully state that the reference teachings of Bozak and Devarakonda are not sufficient to make the proposed combination because the nature of the problems Bozak and Devarakonda address are different, and are resolved by different means.

<u>Borak</u>

Applicants understand Borak to teach a method for a grid application start protocol which includes, in a network: a client request for a computational resource available for computing a task; responding to client's request for a computational resource by sending the client a list (including network addresses) of available computational resources; selecting by the client of a computational resource for reservation; and in response to this selection for reservation: 1) reserving the selection and sending the reservation number to the client, or 2) when computational resources are unavailable for computing the task, sending the request to a different portion of the network.

As stated in Borak at paragraph [0015], a purported advantage of this invention is that:

applications can get the necessary resources allocated in a grid landscape before actually trying to run on a grid node. Furthermore, similar applications trying to start at the same time at the same grid node do not interfere with each other.

In sum, in order to achieve a goal of allocating computational resources in a grid landscape before trying to run these computational resources on a grid node, the client initially requests a list of available computational resources for computing a task. A list of available computational resources for computing a task is sent to the client, and the client's subsequent selections of these computational resources is reserved.

Serial No.: 10/632,447 9 Examiner: Bayard, Djenane M.

Art Unit: 2141

Devarakonda

In contrast, Devarakonda addresses a completely different issue in a completely different way. Devarakonda's invention relates to a node (machine) being selected and used to handle a client's request based upon the node's affinity to the client. Applicants understand Devarakonda to teach an "affinity based router and a method for routing and load balancing in an encapsulated cluster of server nodes". (Devarakonda, Abstract)

To purportedly accomplish this, Devarakonda provides the following: a multi-node server having a node that is designated as a TCP router; the address of this TCP router is given to clients; Client's request is sent to the TCP router; the TCP router selects a node from the multi-node server to process the client's request and routes the client's request to this node; TCP router maintains an affinity table indicating to which node a client's request was routed; and subsequent client requests are routed to certain nodes from the multi-node server based on affinity records.

Devarakonda states in column 4, lines 10-14 the following:

It is yet another object to keep the method for affinity routing simple but effective, so that the overhead for affinity routing and load balancing is small compared to that for serving the client requests.

The Devarakonda technology is concerned with the selection of a node within a multi-node server to handle a client's request based upon prior node selections involving prior client requests. Nowhere within Devarakonda are issues involving the allocation and reservation of computational resources to be run on a grid node addressed, such as in Bozak. Instead, while Bozak focuses on the allocation and reservation of computational resources to be run eventually on a grid node, Devarakonda focuses upon a particular node to be selected to handle a client's request based upon prior node selections.

Moreover, even combining Bozak and Devarakonda would not further Devarakonda's objective as stated herein in keeping "the method for affinity routing simple but effective, so that Serial No.: 10/632,447

10 Examiner: Bayard, Djenane M.

Art Unit: 2141

the overhead for affinity routing and load balancing is small compared to that for serving the client requests". As explained herein, the nature of the problems which are purportedly solved in Bozak and Devarakonda are different. Consequently, there is no suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify or combine these reference teachings.

Suggested Combination of Bozak and Devarakonda Would Require a Major Reconstruction and Redesign of Bozak's Elements

Additionally, the proposed modification of Bozak with the technology of Devarakonda would change Bozak's principle of operation, and therefore the teachings of the references are not sufficient to render Applicants' claims *prima facie* obvious. In <u>In re Ratti</u>, the court reversed a rejection, holding that the:

suggested combination of references would require a substantial reconstruction and redesign of, the elements shown in [the primary reference] as well as a change in the basic principle under which the [primary reference] construction was designed to operate.

270 F.2d at 813, 123 USPQ at 352.

Applicants respectfully assert that the combination of Bozak and Devarakonda would require a substantial reconstruction and redesign of the elements shown in Bozak as well as a change in the Bozak's basic principle under which Bozak's construction was designed to operate. For example, Bozak has a method initially involving a client requesting a list of available computational resources from a system. Devarakonda has a method initially involving a client receiving a TCP address from a node designated as a TCP router within a system, to which the client will send a request.

Serial No.: 10/632,447 11 Examiner: Bayard, Djenane M.
Art Unit: 2141

Next, Bozak's client receives a list of computational resources and makes a selection. A reservation of this selection is made and a reservation number is generated and sent to the client. In contrast, Devarakonda's TCP router takes its client's request, and then routes this request to a selected suitable node, while maintaining an affinity table. Bozak's invention involves much client input as to a selected computational resource, whereas Devarakonda' invention does not involve user input as to which server node will process a client's request. Instead, Devarakonda's TCP router makes these affinity based selections.

In order for Bozak to incorporate Devarakonda's invention, a major reconstruction and redesign of Bozak's elements would have to be performed, in order to move from an invention involving much client input, to one with limited client input. Additionally, in reworking Bozak to be such, the basic principle under which Bozak's construction was designed to operate will have changed.

Therefore, in light of the foregoing reasoning, Applicants respectfully submit that the Examiner's conclusion of obviousness is based on improper hindsight reasoning because express or implicit motivation to combine the references Bozak and Devarakonda is lacking.

Additionally, the teachings of the Bozak and Devarakonda are not sufficient to render Applicants' claims *prima facie* obvious because the suggested combination of these references would require a substantial reconstruction and redesign of, the elements shown in Bozak as well as a change in the basic principle under which Bozak's construction was designed to operate.

Consequently, Applicants respectfully submit that since the examiner's conclusion of obviousness is based on improper hindsight reasoning, the embodiment of the Applicants' invention as set forth in Independent Claims 1, 10, and 18 are not rendered obvious by Bozak in view of Devarakonda. Additionally, Applicants respectfully point out that Claims 2-7, 11-17,

Serial No.: 10/632,447 12 Examiner: Bayard, Djenane M.

and 19-24 are in condition for allowance as being dependent on allowable base claims. For reasons stated herein, Applicants respectfully state that Bozak in view of Devarakonda does not render obvious Applicants' invention as claimed in Claims 1-26 and as such the rejection under 35 U.S.C. §103(a) is overcome.

Serial No.: 10/632,447 13 Examiner: Bayard, Djenane M.
Art Unit: 2141

CONCLUSION

In light of the above-listed remarks, the Applicants respectfully request allowance of the Claims 1-26.

The Examiner is urged to contact Applicant's undersigned representative if the Examiner believes such action would expedite resolution of the present Application.

Respectfully submitted,

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Date: <u>(7/0)</u>, 2007

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Serial No.: 10/632,447 14 Examiner: Bayard, Djenane M.

Art Unit: 2141